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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/731,141	12/06/2000	Daniel W. Sexton	30-GF-1100	8687

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EXAMINER
PHAM, THOMAS K

ART UNIT	PAPER NUMBER
2121	

DATE MAILED: 03/07/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

-- *The MAILING DATE of this communication appears on the cover sheet with the correspondence address* --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) FROM
THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed
  after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any
  earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on <u>23 February 2005</u>.

2a)☐ This action is **FINAL**.   2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is
closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-20* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-20* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All   b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage
application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☐ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
    Paper No(s)/Mail Date _____.

4)☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____ .

5)☐ Notice of Informal Patent Application (PTO-152)

6)☐ Other: _____.

Response to Amendment

1.   This action is in response to the request for continued examination filed on 2/23/2005.

Quotations of U.S. Code Title 35

2.   The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the

basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claim Rejections - 35 USC § 103

4.   Claims 1-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent

No. 6,282,454 ("Papadopoulos") in view of U.S. Patent No. 6,651,190 ("Worley").

Referring to claims 1 and 9

Papadopoulos teaches controlling and monitoring an industrial controller using a Web interface,

utilizing a system including a programmable logic controller (PLC), a local server, comprising:

monitoring and controlling a system using a programmable logic controller (PLC) (col. 4 lines

36-46, "Associated with the PLC ... information of the PLC 32"); exchanging communications

between the PLC and a local server (col. 4 lines 21-35, "The web server 30 ... through the web

server 30") displaying information from the PLC (col. 8 lines 37-43, "The different request ...

Ethernet statistics and others"); transmitting commands from client interface to the PLC (col. 4

lines 30-35, "The client interface allows ... through the web server 30"), wherein the PLC is

configured to determine whether to energize an output module based on a state of an input

module (col. 2 lines 48-50, *"at least one PLC control system running an application program for*

controlling output devices in response to status of input device") but does not teach transmitting,

via the wireless ISP server, commands from a wireless user communication device to the remote

monitored controller (PLC); **and controlling said PLC, via said wireless ISP server, by**

formatting, in a wireless markup language, response to the commands. However, Worley

teaches a technician monitors and transmits commands from a remote computer station 132 (see

fig. 3) to a host computer 110 (local server) for communication with a remote maintenance

controller 100 via a wireless ISP server (col. 7 lines 28-38, "communication links from a remote

computer station to the ... to the remote maintenance controller 100") [Official Notice is taken

that the remote computer station could be any type of communication device including portable

labtop, desktop, PDA etc]; and **the technician transmits commands from the remote**

computer station 132 via a wireless ISP server or a conventional cell phone provider to

control the host computer 110 (see figure 3 and col. 7 lines 31-35, *Examiner interprets that in*

order to communicate with a cell phone or any device having small display, the wireless ISP or a

conventional cell phone provider inherently must format the commands or messages to a

Wireless Markup Language (WML) as stated by the applicant on page 5 lines 5-9)) for the

purpose of monitoring and transmitting commands to control a remote device. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate the wireless ISP communication of Worley with the web interfacing programmable controller of Papadopoulos because it would provide for the purpose of monitoring and transmitting commands to control a remote device from anywhere a wireless connection is available.

Regarding claim 2

Papadopoulos teaches a step of exchanging communications between the PLC server and the local server further comprises the step of sending PLC operational data from the PLC to the local server (col. 5 line 64 to col. 6 line 45, "The PLC 32 interfaces ... the end of a scan interrupt").

Regarding claim 3

Papadopoulos teaches a step of exchanging communications between the local server and the ISP server further comprises the step of sending the PLC operational data from the local server to the ISP server (col. 9 lines 56-67, "A user at a remote ... previously shown in Table 1"). Worley teaches exchanging communication between the remote computer station and the remote maintenance device via a wireless ISP server as stated in the above rejection to claim 1.

Regarding claim 4

Papadopoulos teaches sending the monitoring device operational data from the ISP server to the browser, and displaying the monitoring device operational data on the client display (col. 4 lines 1-4, "The browser 10 will send ... the process control system 6"). Worley teaches exchanging communication between the remote computer station and the remote maintenance device via a wireless ISP server as stated in the above rejection to claim 1.

Regarding claim 5

Papadopoulos teaches inputting at least one PLC command (col. 4 lines 33-35, "Controlling the

PLC 32 ... through the web server 30"); inputting PLC operational response data using the input

device (col. 2 lines 54-62, "The Web interface provides ... through the Internet access"); sending

the at least one PLC command from the client interface to the ISP server (col. 4 lines 30-35,

"The client interface ... through the web server 30"); and sending the PLC operational response

data from the client interface to the ISP server (col. 4 lines 36-41, "Associated with the PLC 32

... and receive the response") Worley teaches exchanging communication between the remote

computer station and the remote maintenance device via a wireless ISP server as stated in the

above rejection to claim 1.

Regarding claim 6

Papadopoulos teaches sending the at least one PLC command from the ISP server to the local

server using the Internet (col. 4 lines 30-35, "The client interface ... through the web server 30");

and sending the PLC operational response data from the ISP server to the local server using the

Internet (col. 4 lines 36-41, "Associated with the PLC 32 ... and receive the response"). Worley

teaches exchanging communication between the remote computer station and the remote

maintenance device via a wireless ISP server as stated in the above rejection to claim 1.

Regarding claim 7

Papadopoulos teaches a step of exchanging communications between the PLC and the local

server further comprises the steps of: sending the at least one PLC command from the local

server to the PLC (col. 5 line 64 to col. 6 line 45, "The PLC 32 interfaces ... the end of a scan

interrupt"); and sending the PLC operational data from the local server to the PLC (col. 9 lines

17-29, "The operating system 44 ... processing the request").

Regarding claim 8

Papadopoulos teaches controlling an operation of the PLC using the at least one PLC command

(col. 6 lines 35-45); and controlling the operation of the PLC using the PLC operational response

data (col. 9 lines 17-29, "The operating system 44 ... processing the request").

Regarding claim 10

Papadopoulos teaches local server further configured to access PLC operational data from said

PLC (col. 5 line 64 to col. 6 line 45, "The PLC 32 interfaces ... the end of a scan interrupt").

Regarding claim 11

Papadopoulos teaches local server further configured to communicate the PLC operational data

to the ISP server (col. 4 lines 21-35, "The web server 30 ... through the web server 30"). Worley

teaches exchanging communication between the remote computer station and the remote

maintenance device via a wireless ISP server as stated in the above rejection to claim 9.

Regarding claim 12

Papadopoulos teaches ISP server further configured to communicate the PLC operational data to

the web browser (col. 4 lines 43-46, "Using a web browser ... information of the PLC 32").

Worley teaches exchanging communication between the remote computer station and the remote

maintenance device via a wireless ISP server as stated in the above rejection to claim 9.

Regarding claim 13

Papadopoulos teaches communication with the PLC operational data. Worley teaches

exchanging communication between the remote computer station and the remote maintenance

device via a wireless ISP server as stated in the above rejection to claim 9,

Regarding claim 14

Papadopoulos teaches client interface further configured to initiate at least one PLC command

and communicate the PLC command to the ISP server (col. 4 lines 30-35, "The client interface

... through the web server 30"). Worley teaches exchanging communication between the remote

computer station and the remote maintenance device via a wireless ISP server as stated in the

above rejection to claim 9.

Regarding claim 15

Papadopoulos teaches client interface further configured to initiate PLC operational response

data and communicate the PLC operational response data to said ISP server (col. 4 lines 36-41,

"Associated with the PLC 32 ... and receive the response"). Worley teaches exchanging

communication between the remote computer station and the remote maintenance device via a

wireless ISP server as stated in the above rejection to claim 9.

Regarding claim 16

Papadopoulos teaches ISP server further configured to communicate the at least one PLC

command and the PLC operational response data to said local server (col. 4 lines 36-41,

"Associated with the PLC 32 ... and receive the response"). Worley teaches exchanging

communication between the remote computer station and the remote maintenance device via a

wireless ISP server as stated in the above rejection to claim 9.

Regarding claim 17

Papadopoulos teaches local server further configured to communicate the at least one PLC command and the PLC operational response data to the PLC (col. 4 lines 39-41, "The web server 30 ... receive the response").

Regarding claim 18

Worley teaches remote computer station inheritly with a user interface configured for an input of information and a display configured to display the user input information and comunication with the remote maintenance computer via wireless ISP server as stated in the above rejection to claim 9.

Regarding claim 19

Papadopoulos teaches communication with the PLC operational data but does not teach formatting and processing operational data into a wireless markup language. However, Worley teaches exchanging communication between the remote computer station and the remote maintenance device via a wireless ISP server as stated in the above rejection to claim 9. It would have been obvious to one of ordinary skill in the art at the time of the invention to format and process the operational data into the wireless markup language in order to view the data using Wireless Application Protocol (WAP), which enable wireless portable devices to communicate over the Internet.

Regarding claim 20

Papadopoulos teaches communication with the PLC operational data but does not teach applying a wireless application protocol to the PLC operational data. However, Worley teaches exchanging communication between the remote computer station and the remote maintenance device via a wireless ISP server as stated in the above rejection to claim 9. It would have been

obvious to one of ordinary skill in the art at the time of the invention to apply a wireless

application protocol to the PLC operational data for viewing over the Internet where cites are

formatted with wireless markup language.

Response to Arguments

5.   Applicant's arguments with respect to claims 1-20 have been considered but are not

persuasive. See the above rejection to claims 1 and 9.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should

be directed to examiner *Thomas Pham*; whose telephone number is (571) 272-3689, Monday - Thursday

from 6:30 AM - 5:00 PM EST or contact Supervisor *Mr. Anthony Knight* at (571) 272-3687.

Any response to this office action should be mailed to: **Commissioner for Patents, P.O.**

Box 1450, Alexandria VA 22313-1450. Responses may also be faxed to the **official fax**

number (703) 872- 9306.

Information regarding the status of an application may be obtained from the Patent

Application Information Retrieval (PAIR) system. Status information for published applications

may be obtained from either Private PAIR or Public PAIR. Status information for unpublished

applications is available through Private PAIR only. For more information about the PAIR

system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR

system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Thomas Pham
Patent Examiner

TP

March 4, 2005
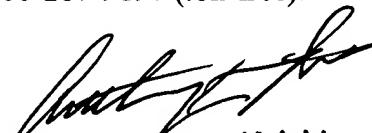
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